



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,251	01/09/2004	William R. McDonnell	MCDW 8238D1	7751
1688	7590	03/22/2006	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			HOLZEN, STEPHEN A	
			ART UNIT	PAPER NUMBER
			3644	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/754,251	<b>Applicant(s)</b> MCDONNELL, WILLIAM R.	
	<b>Examiner</b> Stephen A. Holzen	<b>Art Unit</b> 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1, 4-9, 12, 13, 18, 19, 22, 34, 35, 37-39, 41, 42, 45, 46 and 51-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, 12, 13, 18, 19, 22, 34, 35, 37-39, 41, 42, 45, 46, 51-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED**

**ACTION**

***Response to Arguments***

1. Applicant's arguments filed 1/6/2006 have been fully considered but they are not persuasive.
  - a. Applicant has suggested that the Teledyne is not an enabling reference under 102(b). The examiner thinks this is an interesting approach, however the applicant has not provided adequate arguments (including references to the page and line numbers) to convince the examiner that Teledyne is indeed non-enabling. A mere statement of applicant's opinion about Teledyne is not an adequate argument. The examiner asserts that Teledyne is an enabling disclosure in that each figure represents an experiment actually completed and followed through with. Teledyne analyze each capture concept individually and also writes separate conclusions for each.
    - On page 107, Teledyne teaches that the articulated net is not an optimal design. A reference does not need to be "optimal" or even assert "optimal characters" to be enabling. The examiner asserts that even where the prior art highlights characteristic that are "less than optimal" the prior art is still an enabling reference for all that it does teach. Figure 28 teaches at least a net, a pole, a plane, and an energy-absorbing device. There is nothing in the Teledyne reference that suggests these elements in combination would fail to

work as disclosed. Nor does Teledyne suggest that one of ordinary skill in the art would require “undue experimentation” to make the articulation net concept work as proposed. The examiner asserts that Figure 42 is an enabling disclosure under 35 USC 102(b) and 102(a).

- On page 140: Teledyne teaches that the rotary concept is a known means for capturing an aircraft, however also states that further studies would be required for this concept to be practical. Again, The examiner asserts that even where the prior art highlights characteristic that are “less than optimal” the prior art is still an enabling reference for all that it does teach. Figure 42 teaches at least a carousel, a ring, a cable, an energy-absorbing device, a hook and an aircraft. There is nothing in the Teledyne reference that suggests these elements in combination would fail to work as disclosed. Nor does Teledyne suggest that one of ordinary skill in the art would require “undue experimentation” to make the articulation net concept work as proposed. The examiner asserts that Figure 42 is an enabling disclosure under 35 USC 102(b) and 102(a).
- On page 199: Teledyne teaches a flying rotor and cables, and there are problems with this idea that would require further studies. Further Teledyne teaches that the flying rotor and cables are overly

expensive to be seriously considered. The examiner asserts that even where the prior art highlights characteristic that are "less than optimal" the prior art is still an enabling reference for all that it does teach. There is nothing in the Teledyne reference that suggests these elements in combination would fail to work as disclosed. Nor does Teledyne suggest that one of ordinary skill in the art would require "undue experimentation" to make the rotor and cable concept work as proposed. The examiner asserts that Figure 42 is an enabling disclosure under 35 USC 102(b) and 102(a).

Furthermore the fact that this concept is overly expensive should not be taken into consideration when judging its ability to function as disclosed.

b. Applicant has further argued that Teledyne teaches a plurality of mutually exclusive species and that the teachings of Teledyne cannot be viewed as "a single disclosure". The examiner agrees that Teledyne disclose a plurality of different embodiments, however asserts that a reference is useable for everything that it teaches. (The court has held that a reference "becomes a reference for everything it discloses." *Ex parte Utschig*, 156 USPQ 156, 157 (Bd. App. 1966)) However, applicant's arguments are moot in view of the amendments and new grounds of rejection.

Art Unit: 3644

2. Claims 1, 4-9, 12, 13, 18, 19, 22, 34, 35, 37-39, 41, 42, 45, 46, 51-68 are pending.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 8, 9, 12, 13, 18, 19, 22, 34, 35, 37, 39, 41, 42, 46, 51-58, 60, 61, 62 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teledyne in view of Tucker (1,748,663).

Figure 28 teaches every aspect of the independent claims except wherein the craft has a hook lateral of the longitudinal axis, and wherein the net & hook are "releasably" secured to one another after the craft intercepts the net.

The embodiment of Figure 28 teaches every aspect of the present invention except wherein the hook is on the edge of the wing and wherein the hook and net have a "releasable" connection.

Figure 43 to Teledyne teaches a hook on the edge of a wing.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made to relocate the hook of Figure 28 to the edge of a wing (as illustrated in Figure 43) since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse 86 USPQ 70.

Teledyne teaches every aspect of the present invention except wherein the hook and net have a “releasable” connection.

Tucker teaches that it is known in the art to use a “hook with a latch” to releasably connect with a line.

It would have been obvious to one having ordinary skill in the art to use a hook on wing for the purpose of increasing the reliability of the capture device.

Re – Claim 8: a net has “multiple vertically oriented arrestment lines”

Re – Claim 9: the wings are swept at least 15 degrees (see Figure 28)

Re – claim 12, 13, and 19: two poles hold up the net of figure 28

Re – Claim 57: Teledyne teaches that it is well known to hold the arrestment lines from a device that requires wind for lift. (See Figure 74, which is a Para-wing type device that uses the wind for sustaining flight). Figure 43 to Teledyne teaches a hook on the edge of a wing.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made to relocate the hook of Figure 28 to the edge of a wing (as illustrated in Figure 43) since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse 86 USPQ 70.

Teledyne teaches every aspect of the present invention except wherein the hook and net have a “releasable” connection.

Tucker teaches that it is known in the art to use a “hook with a latch” to releasably connect with a line.

It would have been obvious to one having ordinary skill in the art to use a hook on wing for the purpose of increasing the reliability of the capture device.

Re – Claim 61 and 67: Figure 70 to Teledyne teaches that it is well known to attach a lower end of the net to the ground through a braking device. The upper portion of the line is connected to the ground (i.e. the base) through a pole. (The examiner asserts that even if Teledyne did not disclose this concept it would have been obvious to one having ordinary skill in the art to use a braking device between the lower line and base as taught by Bernard et al (4,143, 840).)

Re – Claim 1 and 62: As discussed above, the examiner has asserted that it would have been obvious to include a hook and latch assembly on the edge of a wing as taught by Tucker. Teledyne teaches in Figure 70 two poles connected to the ground. The cable is attached through the poles and the braking device, on both ends, to the ground. The cable is the only cable being used for capturing and arresting the aircraft. The examiner has already asserted above that it would have been obvious to move the hook from underneath the aircraft to the wing tips. Therefore, this claim is also rejected where the aircraft illustrated in Figure 70, flying at a horizontal angle of 1 to 89 degrees would intercept the cable on the wing, the cable would then slide laterally and vertically along the wing and the hook would engage and secure the cable to the wing of the aircraft. The cable would then extend outwardly in the direction of flight while being braked by the arrestment device.



5. Claims 5-7 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teledyne in view of ordinary skill in the art. Teledyne only discloses a hook on the wing tip that projects forward of the wing. Teledyne does not disclose a hook that is located inboard of the wingtips. It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the hooks at any location inboard of the wing tips since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

6. Claims 38 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teledyne in view of ordinary skill in the art. Teledyne in view of Tucker do not specifically disclose the shape of the claimed hook (i.e. the hook's throat). The court has held that the shape of the claimed device is design choice, which a person of ordinary skill would have found obvious absent persuasive evidence that the particular shape of the claimed device was significant. (See In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)). The Federal Circuit has held that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device the claim device was not patentably distinct from the prior art device. (Gardner v. TEC Systems, Inc. 725 F.2d 1338, 220 USPQ 777 (Fed Cir. 1984), cert. denied 469 U.S. 830, 225 USPQ 232 (1984)). The applicant should note that hooks having throats are not a novel concept. Hooks are well known to have throats with a

smaller diameter than the base (see for example the relatively narrow throat of Bugman's hook. US Pat. 4,039,219).

7. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teledyne in view of Tucker. Neither Teledyne nor Tucker teaches that it is known to put their devices on a watercraft. The examiner asserts however that the phrase "wherein the base is a watercraft" is merely a statement of intended use. The thrust of the invention is not the base, but the combination of the aircraft, hook, line, attachment devices and that the base is a minor part of the invention. The applicant has not claimed a "Watercraft having" the features of claim 1. Instead the applicant has claimed the features of claim 1 --being used on a boat--. It is the examiners position the location of use would have been obvious to one having ordinary skill in the art, at the time the invention was made particularly where the applicant has not put forth any substantial reasons supported by evidence why the devices of Teledyne and Tucker could not be used on a boat. Applicant should remember that opinions are not a substitute for evidence. Should applicant desire to argue that "the intended use of the device of claim 1" is material to the inventive concept, the applicant must present evidence to the office as to why one of ordinary skill in the art would not use the device of Teledyne could not have been relocated onto a boat.

Additional discussion as to "statements of intended use": The phrase "wherein the base is a watercraft" is merely a "statement of intended or desired use." Thus, these claims as well as other statements of intended use do not serve to patentably

Art Unit: 3644

distinguish the claimed structure over that of the reference. See *In re Pearson*, 181 USPQ 641; *In re Yanush*, 177 USPQ 705; *In re Finsterwalder*, 168 USPQ 530; *In re Casey*, 512 USPQ 235; *In re Otto*, 136 USPQ 458; *Ex parte Masham*, 2 USPQ 2nd 1647.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ 2nd 1647

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. *In re Danly*, 120 USPQ 528, 531.

Apparatus claims cover what a device is not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

While a "watercraft" would imply structural limitation, the examiner does not believe that the implied structural limitations amount to anything more than statement of intended use.

8. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Teledyne* in view of *Tucker*. *Teledyne* in view of *Tucker* do not disclose more than one hook. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use more than one hook since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.* 193 USPQ 8.

### ***Conclusion***

9. The examiner believes there to be considerable allowable subject matter in this application, however the examiner did not have the time to call the applicant and discuss. Unfortunately, examiners are not provided with enough time to schedule phone appointments at will. The examiner believes that applicant's strategy (i.e. claiming inventions that are generic to a plurality of species) is not the fastest means for obtaining a patent. Most of the claims are dependant from claim 1 (or other independent claims), and therefore the examiner can piece together rejections from the various embodiments within the Teledyne reference. Had the applicant written the claims such that each successive claim was dependant from the prior claim the applicant would find that the "line of patentability" is very close indeed. The examiner regrets not being able to contact applicant and discuss the plurality of ways the applicant could amend the claims such that they would be allowable. Applicant is invited to call the examiner after reading this rejection. The examiner would be more than happy to set aside an hour or two to discuss, with the applicant, amendments that would make the claims allowable, even after final.

Suggestion #1: Amend claim 1 to include the limitations of claim 62 and amend to say "an arrestment line held up at an upper end by structure supported by a base, a lower end of the arrestment line also being connected to the structure"

Suggestion #2: Argue with evidence that Teledyne is a non-enabling reference. (Arguments without evidence are opinions, which are almost never considered persuasive.)

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

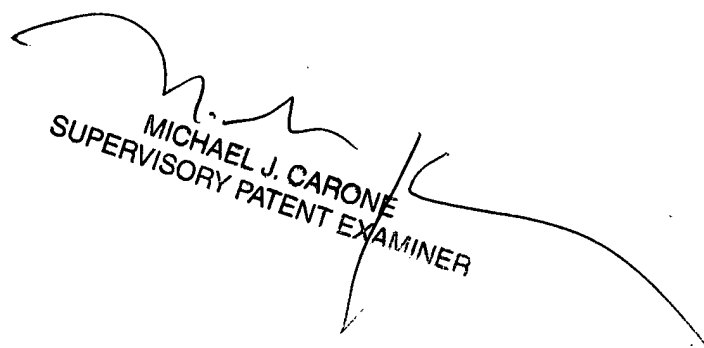
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 571-272-6903. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sah

  
MICHAEL J. CARONE  
SUPERVISORY PATENT EXAMINER